**Amendments to the Claims**

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for detecting rendered animal byproduct in a sample comprising:

combining the sample suspected of containing rendered animal byproduct with a detectable antibody ~~ligand~~ having binding affinity for an analyte for a time and under conditions effective to cause at least some analyte, if present, to bind with at least some antibody ~~ligand~~ to form a complex;

separating unbound antibody ~~ligand~~ from the complex,

determining existence of the complex,

correlating the existence of the complex to determine presence of the analyte in the sample;

wherein the antibody lacks immunoreactivity with animal muscle tissue;

wherein the analyte is a component of rendered animal byproduct;

wherein the sample is animal feed or a component thereof; and

wherein the amount of rendered animal byproduct detected by the method is about 0.005 % to about 0.01% by weight.

2. (Currently Amended) The method of claim 1, wherein:

a detectable label is attached to the antibody ~~ligand~~,

combining the sample with the antibody ~~ligand~~ further comprises combining the sample and antibody ~~ligand~~ with a second antibody ~~ligand~~ that is bound to at least one location on a solid phase for a time and under conditions effective to cause at least some analyte, if present, to bind with at least some antibody ~~ligand~~ and at least some second

antibody ~~ligand~~ such that at least some antibody ~~ligand~~ becomes immobilized in the location, and

determining the existence of the complex comprises determining whether detectable label is present in the location.

3. (Currently Amended) The method of claim 1, wherein:

a detectable label is attached to the antibody ~~ligand~~,

combining the sample with the antibody ~~ligand~~ further comprises combining the sample and antibody ~~ligand~~ with an analyte analog that is bound to at least one location on a solid phase, wherein the antibody ~~ligand~~ has a binding affinity for the analyte analog, and

determining the existence of the complex comprises determining the amount of labeled antibody ~~ligand~~ present in the location.

4. (Currently Amended) The method of claim 1, wherein:

combining the sample with the antibody ~~ligand~~ further comprises combining the sample and antibody ~~ligand~~ with an analyte analog having a detectable label attached thereto and the antibody ~~ligand~~ has a binding affinity for the analyte analog,

the antibody ~~ligand~~ is bound to at least one location on a solid phase,

the method further comprises separating unbound analyte analog from bound analyte analog after the combining step and before the determining step,

determining the existence of the complex comprises determining the amount of labeled analyte analog present in the location.

5. (Previously Presented) The method of claim 1, wherein:

determining existence of the complex further comprises determining the amount of the complex, and

correlating the existence of the complex further comprises correlating the amount of complex to determine the amount of analyte present in the sample.

6. (Previously Presented) The method of claim 1, wherein the analyte is a component of meat and bone meal.

7. (Previously Presented) The method of claim 1, wherein the analyte is a component of rendered connective tissue or bone.

8-9. (Cancelled).

10. (Previously Presented) The method of claim 1, wherein the analyte is a component of the extracellular matrix of bone or cartilage.

11. (Previously Presented) The method of claim 1, wherein the analyte is chondroitin sulfate, aggrecan, osteocalcin, hyaluronic acid, or Type II collagen.

12. Cancelled.

13. (Currently Amended) The method of claim 1, wherein the assay further comprises:

combining the sample with at least one additional antibody ~~ligand~~ having binding affinity for a component of rendered animal byproduct of one or more known taxonomic groups, but having measurably lower binding affinity for rendered animal byproduct from one or more different taxonomic groups, for a time and under conditions effective to cause the second antibody ~~ligand~~ to bind with the analyte, if present, to form a complex,

determining existence of the second complex, and

correlating the existence of the second complex to determine presence of rendered animal byproduct of a known taxonomic group or combination of taxonomic groups.

14. (Withdrawn) A method of making an antibody that is immunoreactive with a rendered animal byproduct or a component thereof, comprising administering to an animal a composition comprising an immunogen in such an amount and under such conditions as to cause an immune response in the animal, wherein the immunogen comprises a molecule or substance having one or more structural components with the same immunoreactivity as a component of the rendered animal by product.

15. (Previously Presented) A kit for performing the method of claim 1, comprising materials useful in performing the method and instructions for correlating results of the method to determine the presence of rendered animal byproduct, the amount of rendered animal byproduct, or both;

wherein the materials useful in performing the method comprise a detectable ligand having binding affinity for an analyte, and wherein the analyte is a component of rendered animal byproduct.

16. Canceled.

17. (Previously Presented) The method of claim 2, wherein the detectable label comprises at least one of radioactive molecules, enzymes, substrates, cofactors, inhibitors, fluorescent moieties, chemiluminescent moieties, or magnetic particles.

18. (Previously Presented) The kit of claim 15, wherein the amount of rendered animal byproduct detected is about 0.005 % to about 0.01 % by weight.

19-22. (Canceled)

23. (New) A method for detecting rendered animal byproduct in a sample comprising:

combining the sample suspected of containing rendered animal byproduct with a detectable ligand having binding affinity for an analyte for a time and under conditions effective to cause at least some analyte, if present, to bind with at least some ligand to form a complex,

separating unbound ligand from the complex,

determining existence of the complex,

correlating the existence of the complex to determine presence of the analyte in the sample;

wherein the ligand is a protein selected from the group consisting of; hyaluronic acid binding protein, bone sialoprotein-binding protein, collagen adhesion protein, clumping factor A, clumping factor B, elastin binding protein, fibronectin binding protein A, or fibronectin binding protein B;

wherein the analyte is a component of rendered animal byproduct;

wherein the sample is animal feed or a component thereof; and

wherein the amount of rendered animal byproduct detected by the method is about 0.005 % to about 0.01% by weight.

24. (New) The method of claim 23, wherein:

a detectable label is attached to the ligand,

combining the sample with the ligand further comprises combining the sample and ligand with a second ligand that is bound to at least one location on a solid phase for a time and under conditions effective to cause at least some analyte, if present, to bind with at least some ligand and at least some second ligand such that at least some ligand becomes immobilized in the location, and

determining the existence of the complex comprises determining whether detectable label is present in the location.

25. (New) The method of claim 23, wherein:

a detectable label is attached to the ligand,

combining the sample with the ligand further comprises combining the sample and ligand with an analyte analog that is bound to at least one location on a solid phase, wherein the ligand has a binding affinity for the analyte analog, and

determining the existence of the complex comprises determining the amount of labeled ligand present in the location.

26. (New) The method of claim 23, wherein:

combining the sample with the ligand further comprises combining the sample and ligand with an analyte analog having a detectable label attached thereto and the ligand has a binding affinity for the analyte analog,

the ligand is bound to at least one location on a solid phase,

the method further comprises separating unbound analyte analog from bound analyte analog after the combining step and before the determining step,

determining the existence of the complex comprises determining the amount of labeled analyte analog present in the location.